

CHAINCAST METHOD AND SYSTEM FOR BROADCASTING  
INFORMATION TO MULTIPLE SYSTEMS WITHIN THE INTERNET

ABSTRACT OF THE INVENTION

5 A method and system for performing chaincast communication to multiple communication systems within a system of coupled electronic devices. In one implementation the electronic devices can be computer systems and the system of coupled electronic devices includes the Internet. The present invention provides a system wherein a broadcast source communicates broadcast information (e.g.,

10 encoded audio radio content, encoded audio/video television content, program instructions, etc.) to a first group of electronic devices. The first group of electronic devices can be instructed by a transmission scheduler to then communicate (e.g., forward) the broadcast information to other electronic devices which devices can also be instructed to communicate to more devices, etc., thereby reducing the

15 bandwidth requirements of the communication channel between the broadcast source and the first group of electronic devices. Slight communication delays may be encountered by the transmission forwarding, but these delays can typically be tolerated in broadcast transmissions (e.g., radio content, television content, seminars, etc.). The transmission scheduler, coupled to the Internet, is used to

20 track and manage which devices are forwarding broadcast information to which other devices. The transmission scheduler is able to re-route communications when one or more devices terminates or to provide better communication load sharing across the system. The communication is "chaincast" because the forwarding from one device to another, to another, etc., creates a logical

25 communication "chain" from the broadcast server to the receiving devices.